

ABSTRACT

The microreactor is completely integrated and is formed by a semiconductor body having a surface and housing at least one buried channel accessible from the surface of the semiconductor body through two trenches. A heating element extends above the surface over the channel and a resist region extends above the heating element and defines an inlet reservoir and an outlet reservoir. The reservoirs are connected to the trenches and have, in cross-section, a larger area than the trenches. The outlet reservoir has a larger area than the inlet reservoir. A sensing electrode extends above the surface and inside the outlet reservoir.